

1220 WASHINGTON AVE., STATE CAMPUS, ALBANY, NEW YORK 12232

MONOLITHIC BRIDGE DECK
EXPERIMENTAL COST EFFECTIVE RESTORATION
SOUTHWESTERN BLVD. S.H. 9269 (ROUTE 20)
OVER 18 MILE CREEK

materials bureau technical services subdivision

INITIAL REPORT

The same of the sa EXPERIMENTAL FEATURE PROJECT NO. 013676006

MONOLITHIC BRIDGE DECK

EXPERIMENTAL COST EFFECTIVE RESTORATION

SOUTHWESTERN BLVD. S.H. 9269 (ROUTE 20)

INITIAL REPORT

JANUARY 1978

RONALD A. BROWN

every 1-19 feet apart and are shout a tucken long, ...

EXPERIMENTAL PERIORS SECURE NO. 013676006 - 100 CHARLES OF SECURIOR SECURIO

REPORT OF BROWN

## SOUTHWESTERN BLVD. S.H. 9269 (RTE. 20) BIN 1015450, ERIE COUNTY CONTRACT RC 66-21, PIN 5034.37

The structure carrying Southwestern Blvd. over 18 mile Creek consists of seven simple spans with a total length of approximately 414 feet and width of 40 feet. Built in 1930, it was reconstructed in 1968 and has an 11" monolithic deck. The new rehabilitation done in 1976-77 consisted of various items of concrete removal followed by an overlay of Latex Modified Concrete. The areas of the various concrete removal items were based on a survey conducted on April 6, 1976, which consisted of visual inspection, chain drag, pachometer readings, and half cell potential readings. The overlay placement was performed on the WB lanes September 25, 1976, October 15, 1976, and the EB lanes November 17, 1976, April 29, 1977. The overlay was designed to provide at least  $2\frac{1}{4}$ " of cover over the rebars. The minimum thickness was  $1\frac{1}{2}$ " and in many areas 3" or more in depth.

On May 19, 1977, the Latex Modified Concrete overlay was inspected and a corrosion potential survey was conducted. (see Table #1) Wires connected to the rebars in each span were used for grounds. The following observations concerning the overlay were made:

- 1. The entire bridge deck was visually inspected and no distress or cracked areas were noted.
- 2. The time texture appeared marginal to adequate in most areas though there were a few "open" or torn areas.
- 3. Results of the potential survey show values decreasing in all areas (see Table #1), although some readings indicate an "active" condition. (greater than 0.35)

On November 16, 1977, the new overlay again was visually inspected and the following observations were noted:

- 1. All longitudinal joints between lanes have separated. The separation is very slight.
- 2. Small transverse cracks appeared at the longitudinal joints in the outside lanes and extend towards the curb. They are spaced every 1-1½ feet apart and are about 6 inches long.
- 3. A few longitudinal cracks have developed from some transverse joints. The cracks are approximately 1½ feet in length.
- 4. A number of large longitudinal and transverse cracks have developed in middle of some spans.

NYSDOT Library 50 Wolf Road, POD 34 Albany, New York 12232

## SOUTHWESTERN BLVD, S.H. 9269 (RTE. 20) BLU TOISASO, ERIE COUNTY CONTRACT RC 66-21; PIN 5034.37

The structure cartying Southwestern Blvd. over 18 mile Creek consists of seven simple space with a total largeh of approximately 614 feet and width of 40 feet. Built in 1930, it was reconstructed in 1958 and has an il" occalitate dock. The new rehabilitation done in 1976-77 consisted of various stams of various concrete removal followed by an overlay of large meas based on a survey conducted on April 5, 1976, which consisted transfer inspection, chain drag, pachometer readings, and half cell larges first readings. The overlay placement was performed on the Weller's April 29, 1977, The overlay placement was performed on the Weller's April 29, 1977, The overlay was designed to provide at loast 17, 1970, April 29, 1977, The overlay was designed to provide at loast 25, 1970, April 29, 1977, The overlay was designed to provide at loast 25, 1970, April 29, 1977, The overlay was designed to provide at loast 25, 1970, April 29, 1977, The overlay was designed to provide at loast 25, 1970, April 29, 1977, The overlay was designed to provide at loast 25, 1970, April 29, 1977, The utalians thickness was 15, and in many areas 30 or more in depth.

On May 13, 1977, the Lates Modified Concrete overlay was inspected and a corrected converted converted (see Table 91) Wires converted to the converted conve

- L. The spille bridge deck was visually inspected and no distress or
  - Z. The rine resture appeared marginal to adequate in most areas.
- Lesuite of the potential enryey show values decreasing to all areas (not Table VI), although some readings indicate an "active" condition (greater than 0.15)

On Hover et 15, 1977, the new overlay again was visually inspected and the following observations were noted:

- 1. All iongscudinci Joints between lanes have separated. The separation
  - 2. Small transported dracks appeared at the longitudinal joints in the outside land and except towards the curb. They are spaced every life feet space and are about 5 inches long.
    - 3. A few locate of and cracks have developed from some transverse
      - 4. A number of large longicudinal and risasverse oracles have developed in middle of some apana.

NYSDOT Library SO Wolf Road, POD 34 Albary, New York 12732.

- 5. A small patch in Span 1 has delaminated and cracked.
- 6. Many transverse joints contain "hollow" areas on each side of joint (see Fig. 1)

A detailed map showing the location of cracks and delaminated areas will be forwarded in the future. Electrical potentials will be taken to monitor the performance of the overlay system.

- 2 -

A small parch in Span I has delandasted and cracked.

6. Heny transverse joints contain "hollow" areas on each side of joint (see Fig. 1)

A decailed map showing the location of cracks and delaminated areas, will be thewarded in the future. Electrical potentials will be taken to contest the performance of the overlay system.

## SOUTHWESTERN BLVD. S.H. 9269 (ROUTE 20) STRUCTURAL CORES

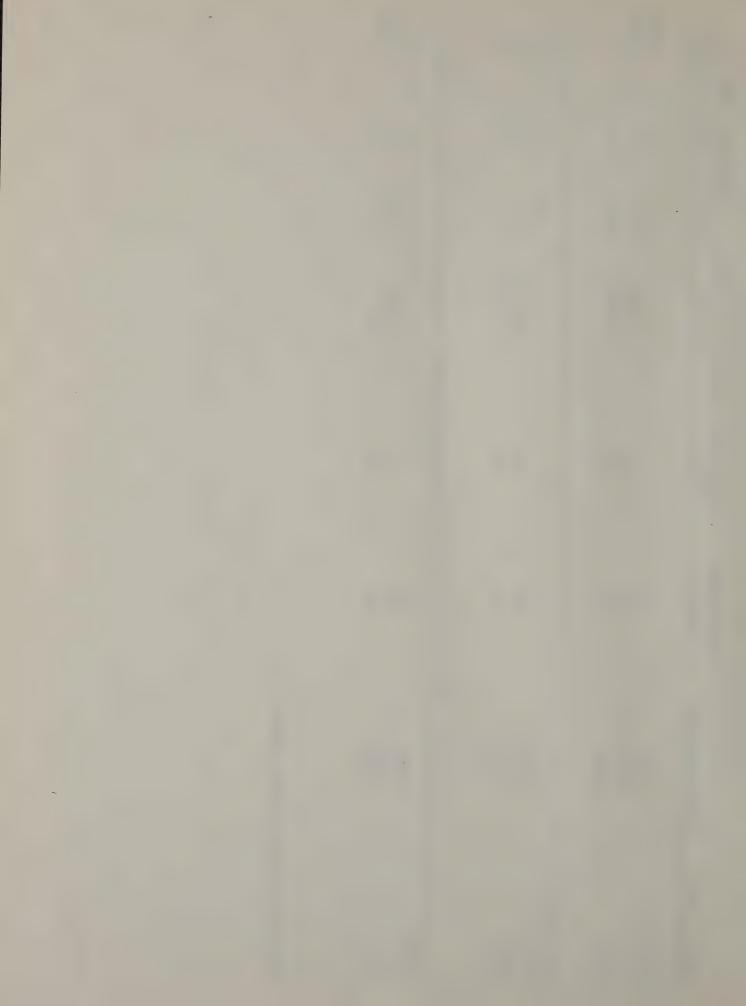
		GRID LOCATION	CATION	CORE		REBAR COVER	No. 100 c. 9. J.
CORE #	SPAN #	LONGITUDINAL TRANSVERSE	TRANSVERSE	DELTH	POTENTIAL	PACH. MEAS. ACTUAL	L REMARKS
1	1	20' North of Approach Slab	20.	Bottom Steel	.51	1-7/8" 1-7/8"	Hvy. Rebar Rust, Serious Delam.
2	2	25' North of Joint #1	25 '	=	• 33	2-1/8" 2.0"	Light Rust, Concrete Sound
က	7	26' South of Bridge End	15'	=	74.	1-1/4" 1-3/8"	" Light Rust, Delaminated Cracked
4	7	25' South of Bridge End	171	- 33	.50	1-1/2" 1-1/2"	Heavy Rust, Delaminated

	1000

SOUTHWESTERN BLVD. S.H. 9269 (ROUTE 20) TEST RESULTS (BEFORE OVERLAY)

3"	0.5	000	0.0
(#/c.)			
CHLORIDES (#/c.y.)	0.8 1.1 0.3	0.9	1.1
CHLO]	4.4 4.0 10.1	1.8 5.7 3.1	1.5
DEPTH OF COVER (inches)	1-7/8"	2-3/4"* 2-1/8"*	1-3/4"
POTENTIAL (VOLTS)	. 38 8 8 .	.35	.48
TRANSVERSE	2' 12' 21'	2' 10' 20'	2° 10° 20°
LONG, LOCATION	0+40 0+40 0+40	0+32.5 0+32.5 0+32.5	0+20 0+20 0+20
SPAN & LANE	Span 4 W.B. W.B. E.B.	Span 3 W.B. W.B. E.B.	Span 2 W.B. W.B. E.B.

\*Denotes interpolated reading



SOUTHWESTERN BLVD. S.H. 9269 (Rte. 20)

	SPAN	-	SPAN 2	2	SPAN 3	3
	*	*	*	*	*	*
Survey Dates	A&B Areas	C Area	A&B Areas	C Area A&B	A&B Areas	C Area
	x = 31	74° =	$\bar{x} = .32$	94° =	$\bar{x} = 32$	$\bar{x} = .45$
Initial Survey 4/6/76	s = .043	= .052	s = .039	7700 =	s = .050	S = .077
	49 = u	= 24	n = 45	= 25	n = 134	n = 112
	× = 28	= ,35	x = 29	= .34	$\bar{x} = .29$	$\bar{x} = .39$
After Construction	s = .072	080° =	s = .078	790° =	s = .058	690° = s
Survey 5/19/77	n = 78	= 29	n = 57	= 27	n = 162	n = 134

	SPAN	7	SPAN	5	SPAN	9
	*	*	*	*	*	*
Survey Dates	A&B Areas	C Area		C Area	- 1	C Area
	x = ,32	= ,42		= .45		$\bar{x} = .50$
Initial Survey 4/6/76	670° = s	= .019		= .054		s= .048
	n = 31	6 =	n = 168	= 82	n = 29	n = 21
	$\bar{x} = .26$	= .33		= .31		x = .38
After Construction	290° = s	= .057		690° =		s = .068
Survey 5/19/77	n = 38	= 10		= 99		n = 24

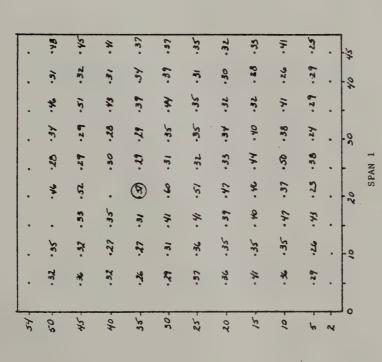
	SPAN 7	7
	*	*
Survey Dates	A&B Areas	C Area
	$\bar{x} = .34$	94. =
initial Survey 4/6/76	s = .045	= .055
	n = 10	09 =
i.	$\bar{\mathbf{x}} = .24$	= ,35
After Construction	s = .072	= .078
Survey 5/19/77	n = 15	69 =

Class A&B areas are areas of concrete removal where reinforcing steel remains in existing chloride contaminated concrete. \*NOTE

Class C areas are areas where reinforcing bars are enclosed within chloride free, new Latex Modified Concrete.



POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY) READINGS IN HUNDREDTHS OF A VOLT



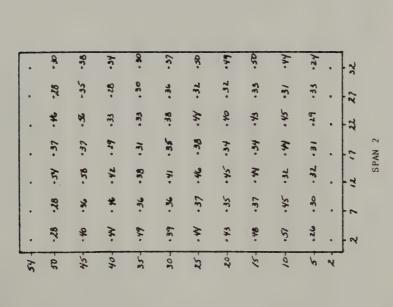
SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450

CALIBRATION CORE LOCATION 

CHLORIDE LOCATION



POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY) READINGS IN HUNDREDTHS OF A VOLT



CALIBRATION CORE LOCATION CHLORIDE LOCATION 0 SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450



POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY)
READINGS IN HUNDREDTHS OF A VOLT

_			6.1							,		-
•	<b>a</b> 0	7 •	ις. Ιπ	5.	₹.	<b>5</b> .	\$.	₹.	\$ ·	3.	•	7
•	ñ	.48	. 57	64.	3	.36		• 32	□ <sup>2</sup> 2	.25	F.	118
•	. 33	69.	.58	. 52	\$	.37	.33	.28	77.	42.		113
	7.	19.	S.	. 52	. 43	.36	.32	67.	.3/	**		80/
	. 34	.50	74.	.37	14.	.39	*34	.30	.30	. 43		€0
•	** .	3.	.37	74.	.39	.32	57.	• 73	.35	٠.		86
	.37	64.	.43	35	*	67.	.11.	.42	.37	. 43		63
	ŝ	.43	#.	. 58	3.	54.	.35	*	. 42	24.	•	88
	82.	.32	75.	.37	• 38	35.	15.	.43	ż	ė	•	63
	٠ 42	7.	4.	.45	15.	97.	.26	77:	.32	. 33		20
	15.	. 33	.30	12.	.35	.35	.33	بز	*	3.8		23
	. 42	.42	¥.	35.	.38	.37	35	.35	.37	.43		50
	. 58	7	7.	ş	64.	. 79	74.	.36	<b>₹</b>	.49		- m
	15.	. 52	쾃	 	.39	67.	17.	.32	-32	. 34		9
	52.	.43	38.	5	۰ 40	67.	57.	2.	67.	.40		. E
	49	-39	3.9	.39	3	Š	35.	87.	.33	.36		8
	88. 86. 14. 48. 44. 1E. 02. 85. 24. 12. 14. 83. 12. 32. 94. 82. 02. 18. 34.	84. Es. 10. 02. 42. pp. 24. se. 14. 25. sp. 14. 92. 84. ps. 16. 04. 84. 88.	32. 36. 44. 55. 54. 44. 14. 34. 30. 42. 44. 18. 18. 18. 14. 36. 55.	qu. 22. 52. 18. 34. 02. 82. 12. 14. 15. 82. 14. 82. 14. 82. 42. 12. 42. 82.	84. 94. 14. 18. 18. 14. 15. 18. 14. 18. 18. 14. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	32. 32. 75. 36. 92. 26. 92. 34. 32. 32. 35. 18. 14. 92. 92. 08. 52. 26. 26. 46.	18. 58. 28. 48. 25. 25. 25. 28. 18. 42. 25. 28. 14. 74. 28. 28. 48. 48. 48. 48. 68.	35. 65. 95. 06. 62. 24. 4. 94. 94. 25. 26. 26. 26. 25. 23. 82. 94.	22. 18. 08. 28. 68. 14. EC. 18. 88. 18. 14. 28. 67. 88. 94. 84. S8. 64.	25. 45. 44. 74. 28. E4. 34. 02. EE. 8E. E4. Pt. Pt. VE. 04. DE. TH. HY. BE. 18.		Le 33 28 43 48 53 58 63 68 73 78 63 88 93 78 103 108 113 1/8 123
	8	9	- -	S	48	76.	*	7.	80 7-	7.		0
	37	Þ	36	7	25	32	38	17	35.	.38		
	*	. 53	32		3	F	.37	62. 84.	5	31		(e)
•	. 38	. 36 .	.32.	. 36	. 5/	.3/	.33	ş	0.00	\$7.		1
•	. 36.	· 7·	8.	5	. 25	· 7£.	. 78.	. 82.	.32.			\$
•		. 4.	. 84.	· .		ž.	8.	.43		36		8/ 8
•	. 26 . 32	.38.	축.	÷.	•	· ¾.	. 37	.37 .	. 38.	35. 36. 61.		3 13
•										. 77.	•	0
•	50 - 36	<i>'</i> h.	40 - 04	35 - SE	30 - 08	17-52	0402	15. ·31	16 01		•	103

NORTH

Ž,

O CALIBRATION CORE LOCATION

CHLORIDE LOCATION

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450

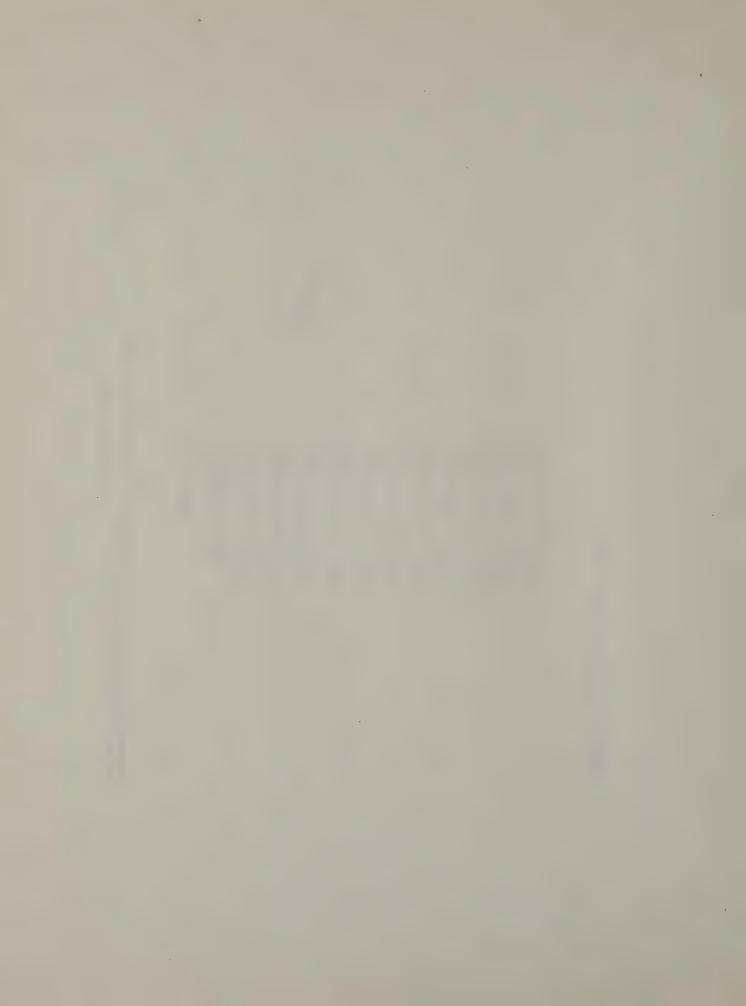


POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY) READINGS IN HUNDREDTHS OF A VOLT

•	য়-	£.	5	£:	Ž.	۶.	<del>3.</del>	4,2	ž.	ð.	•	7-0	
	87.	.37	.37	.36	.73	17.	.28	35.	.36	?	•	2	,
	44.	7	ž	35.	*	97.	2.	.23	.30	.22	•	- 40	4 4 4
	12.	35.	is 18 .37 Pt.	.34	%	٠٧٠	35.	.35	.35	97.		- 27	
- 45	30	*	\$	35.	20-	- 57	40	12	101	h	7	1	

SPAN 4

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK O CALIBRATION CORE LOCATION RC 66-21 B.I.N. 1015450 CHLORIDE LOCATION



POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY)
READINGS IN HUNDREDTHS OF A VOLT

•	7.7	ð.	3.	ž.	4.	£.	N.	۶.	۶.	8,	٠	127	
	17.	. 28	.33	.36	.37	.34	2.	.29	.3/	97.		118	
	3.	ŝ	3	62.	. 28	+24	02.	17.	07.	07.		3	
	.35	. 36	.32	.32	.32	. 87		.47	S	.39		60	
	.51	33	35	.37	22	97.	2	7.	.23	**		1 10	
	2	35	\$2	5	75	43	다	9	ئو□ تم	64		6	
	9	32	35	37	25	22	*0	07	77	2		7	**
	. 46	34	35	5	37	29	> N	12	4	\$		6	
	32 15. 22. 28. 12. 14. 04. 46. 12. 38. 04. 44. 18. 18. 18. 18. 47. 18. 44. 18. 18. 12.	35. 82. 36. 36. 36. 36. 36. 46. 60. 98. 98. 98. 98. 98. 44. 44. 44. 44. 45. 58. 38. 38.	of EE. 24. 26. 36. 34. 26. 16. 14. 26. 36. 66. 76. 24. 16. 76. 64. 14. 56. 14. 74. 44.	24 36. 95. 56. 76. 76. 78. 84. 04. 86. 00. 04. 12. 85. 12. 04. 55. 86. 86. 86. 12. 86.	74 . 45. 54. 74. 15. 25. 75. 55. 74. 14. 45. 35. 93. 94. 48. 56. 28. 58. 58. 58. 58. 59. 95.	18. 42. 83. 43. 64. 55. 64. 42. 44. 50. 54. 45. 65. 64. 65. 65. 65. 65. 65. 65. 65. 65. 65. 65	28 85. 05. 24. 05. 24. 81. 45. 84. 08. 42. 04. 25. 65. 44. 65. 45. 93. 25. 18. 85.	26 . 25. 12. 74. 12. 04. 02. 42. 64. 85. 62. 62. 62. 62. 14. 62. 18. 82. 18. 82. 62. 83.	26. 18. 02. 02. 62. 24. 25. 96. 04. 08. 44. 38. 08. 92. 92. 08. 05. 04. 08. 08. 08.	82 22. 05. 98. 44. 94. 25. 94. Ex. 92. 94. 72. 04. 72. 12. 12. 12. 12. 42. 12. 96. 86. 86. 48. 48.	Ì	7	
	32	38 .	35	. 88	*	·	30.	28 .	08	29 .	•	2	
	\$	39 .	36	3		ñ	. yz	. 62		٠ %	•	2	
	٠ ج			8		•	9	. 65	ق ق		•	2	
			γ2 		٠	*	. <del>.</del>	~;	•	۳ ئ	٠	63	
		2.	, 2-	. 6		7.	য়	• 7	.3		•	5.	SPAN 5
	.37	.33	18.	.28	.29	97.	. 23	57.	67.	18.		59	တ
		. 44	.37	.32	.37	. S2	. 44	*	.29	.28		3	
	. 19	**	ž	*	. 48	97.	3.	.13	.30		•	6.5	
	. 43	34	zh.	3.	3	.31	7	.32	. 26	34		7.	
	3	.37	55.	. 58	ş	.37	. 29	.3/	**	. 39		50	
	74.	.37	*.	.36	. 33	8	, p	87.	.30	.33		- =	
	.39	ž.	.43	.51	. 18	. ¥0	ř.	35.	.33	.34		52	
	67.	92.	**	36.	.39	35.	2	. 2.8	90	.36		- 2	
	.33	78.	.33	·#-	.45	ch.	.42	.39	₩.	.37		. 61	
	. 26 . 33	.37		*	ş	ş.	.32.	ķ	£.	37.		-	
	30	67.	. 49 . 39	£.	.52		2.	. 39	*	*		1	
	ż	₩,	.37	#.	**	.37	ž.	5.	8,	.37			
L												13	
34	30	32	40	35	33	25.	2	3	10	'n	7		

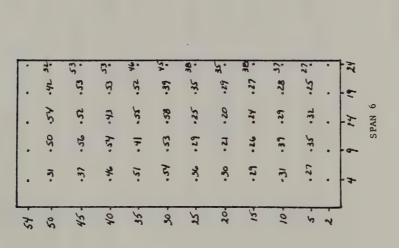
O CALIBRATION CORE LOCATION

CHLORIDE LOCATION

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450



POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY) READINGS IN HUNDREDTHS OF A VOLT



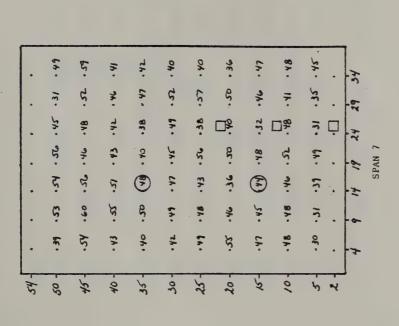
O CALIBRATION CORE LOCATION

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450

CHLORIDE LOCATION



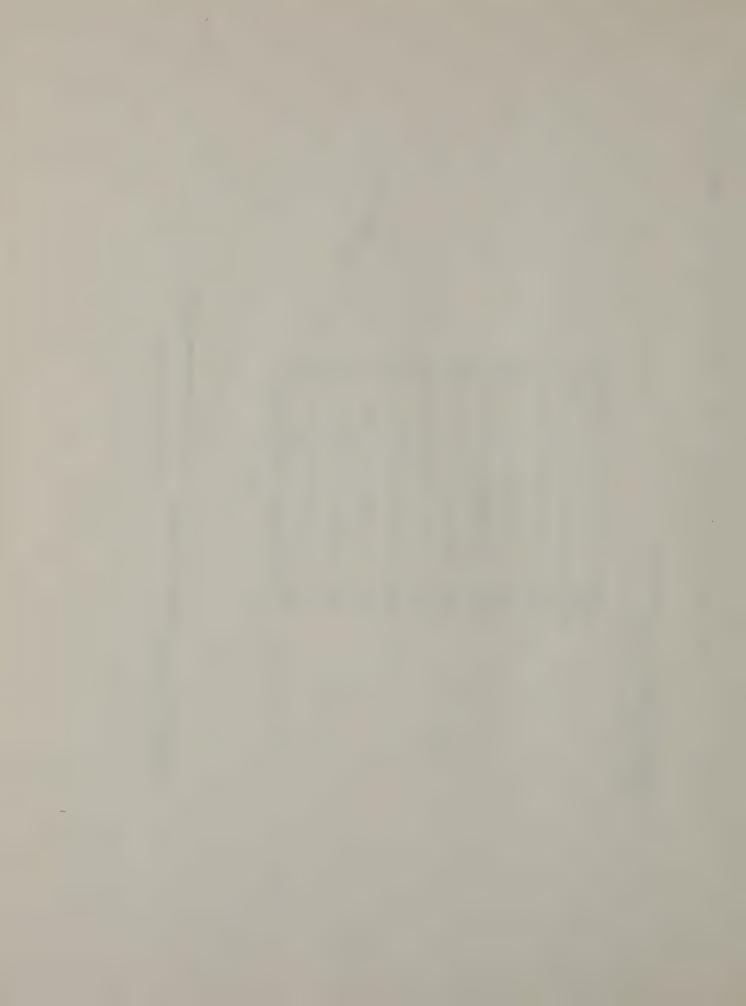
POTENTIAL DATA TAKEN ON 4/76 (BEFORE OVERLAY) READINGS IN HUNDREDTHS OF A VOLT



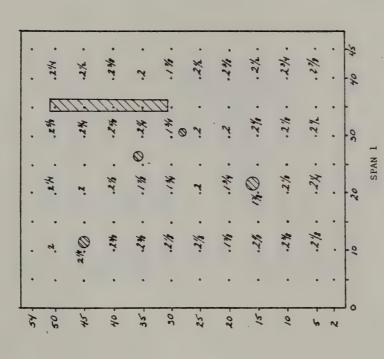
O CALIBRATION CORE LOCATION

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK RC 66-21 B.I.N. 1015450

CHLORIDE LOCATION



REINFORCING STEEL COVER (BEFORE OVERLAY) READINGS IN INCHES



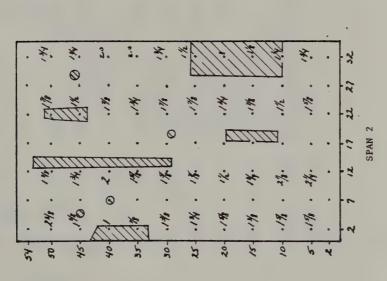
DELAMINATED OR HOLLOW AREA

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450



REINFORCING STEEL COVER (BEFORE OVERLAY)
READINGS IN INCHES



SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450

DELAMINATED OR HOLLOW AREA



REINFORCING STEEL COVER (BEFORE OVERLAY) READINGS IN INCHES

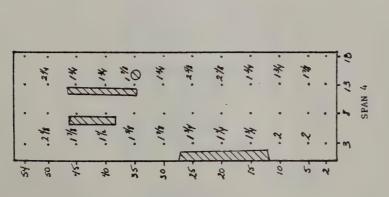
•	1.	7.77	1:7	1.	17	7://	1://	7.3	•	•	67/
٨.	1.1%	140	۲.	.2%	. 2%	7.	.2%	.2%	.2%		118
•	XX		17.		٠	•		. 90			113
Z	1.17			, 2%	. 248	۲.	.2%	. 2 1/8	.2%		108
. %	•••	·	. %	•	. 4%	21/4 .	2/2 .	.2% .	•	•	103
8/, 7.	4.	Z	ż	7	*		•	7,	4.	•	9.8
. 4% .	~©	. */-	-	Z.:	٠ م	. %)	*/*	38.	. 2/2 .	٠	8 83
•	<b>*</b> (	•		<b>7</b> .		11		11	J.	•	ଖ୍ୟ ପ୍ରଥ
. 2% .	. 2/2	*/*	γ.	. 2% .	2/12	17	<u>e.</u>	%:   }	w. 77		78 8
•	•	•	•	•		•	*	'n.	•	•	7 5%
8/52.	117.	%2.	4,2.	1/87.	. 3//2.	<u> </u>	\$/4;	8/12.	۲.	•	68
Ż	Ž. ZŽ.			•	•		•	•		•	F 9
, , , , , , , , , , , , , , , , , , ,	İZZ	۸.	*.	χ. Δ.	2.4%	7.	.z.h	<i>Kr</i> -	. 25/8	•	56
	%Z		<u>Z</u> .	•		. %	. "	•		•	53
. 2 %	~.	1.16	* Z	<b>7</b> .	₩r. €	8/61.	,2%	4.	42.	٠	10
	. z z .	· ×	. 2/2.	. 2%2.	\$ (0	\$. 		ZZ.	. 1/1.	٠	2
	97	X7.	2.	۲,	•	深.	×.	\$1.		٠	38
2/2 .	7%			72.	%;2		•		. 8/8/	•	e 33
•	•	727	<u> </u>	2.	`•	di.	Z] **.	gg-	•	•	3 46
. 3/12	. 7.	12		· */*	. 2%	. 1%1.	. 2/8 .	. 2%	.2%		18 23
	777	4	773 o	٠ لکچا	•		•			•	13
.24		7.	.178	7.	×2.	*	<b>~·</b>	Z Z	7.		0
			,		CTT.	mi					-03
\$. 5°	\$	٠ %	35	30	3.	ş.	<i>i</i>	, o	7	7	

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450

DELAMINATED OR HOLLOW AREA





DELAMINATED OR HOLLOW AREA

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450



REINFORCING STEEL COVER (BEFORE OVERLAY) READINGS IN INCHES

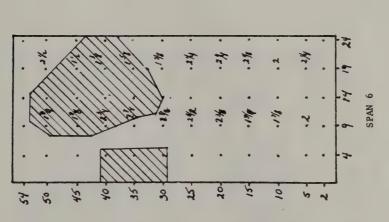
	·
	ZZ ·
•	
. 24° 34°.	. 1/2.
. 28 24	. 3/1. \Q. 4/2.
1/2· 4/2·	24. Zi. 4.
	. 24 2 .
80 40 65 Ve	6h hh 6c hc
	24

DELAMINATED OR HOLLOW AREA

18.F

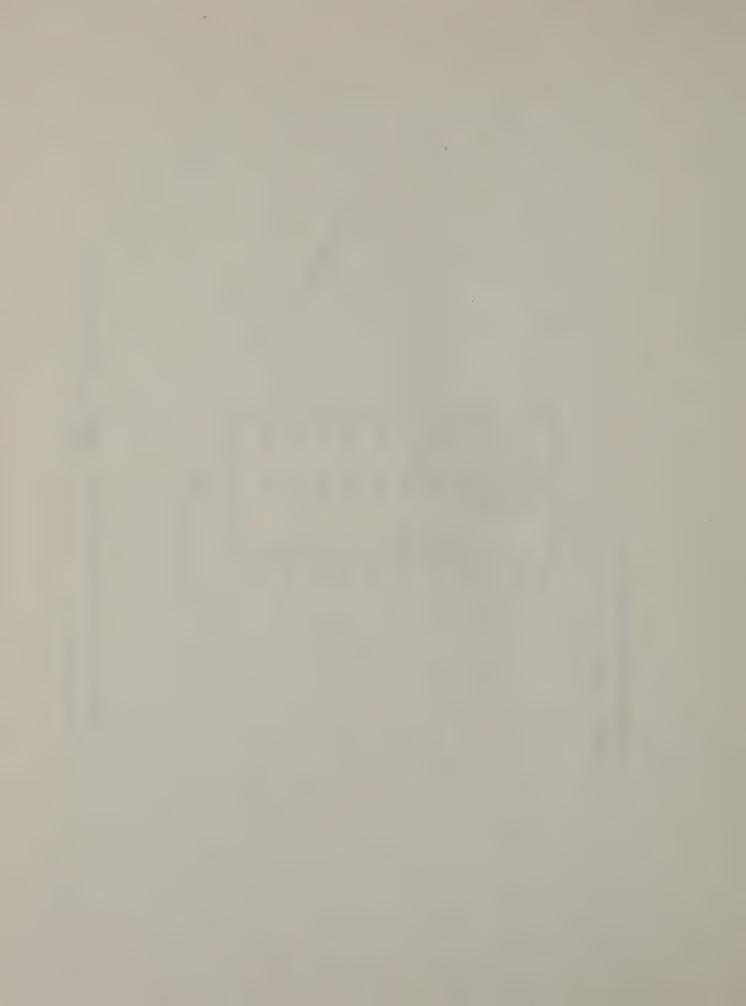
SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK



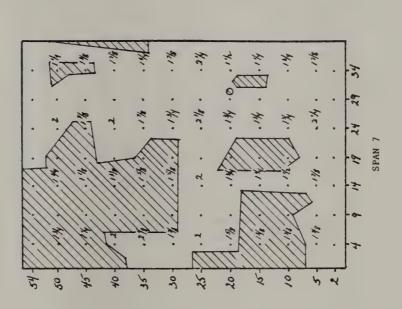


DELAMINATED OR HOLLOW AREA

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK



REINFORCING STEEL COVER (BEFORE OVERLAY)
READINGS IN INCHES

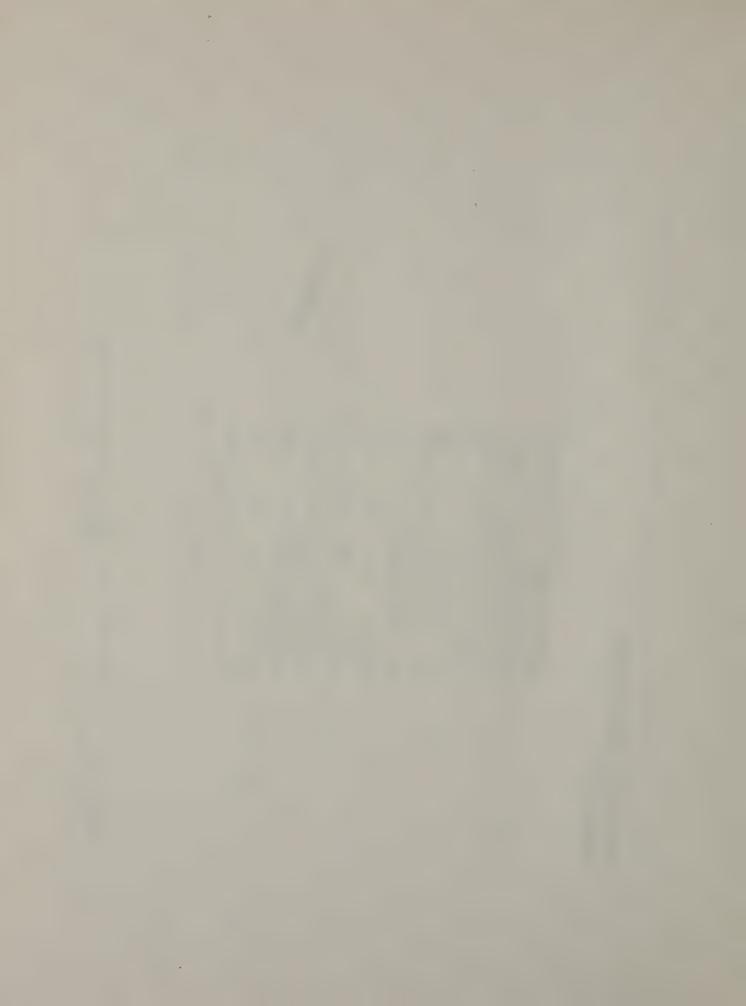


NORTH



DELAMINATED OR HOLLOW AREA

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY)
READING IN HUNDREDTHS OF A VOLT

14.	٠3٧	*	.34	7.	.39	×	-32	0.00	7.5		67:	\$	
81.	.17	.3,	.43	.37	65 E 4	ž	*	.25	. 23	12.	2.	40	
42.	7.	<b>3</b> -	75	74.	. 39	76.	92.	97.	30	.23	<u>ئ</u>		
./5	.27	97.	.25.	بن.	.32	.33	ä.	87.	97.	12.	02.	30	
15	. 13	17.	. 26	.35	.30	. or	42.	•30	r.	.12	-23	-	C DAN 1
.22	28.	.43	. 47	\$	*	÷	.37	.32	15.	ÿ	. 19	30	CD
37.	.30	.36	.3/	7.	.37	\$.	36.	35.	%	. 29	77.	`	
.27	.31	.32	¥.	.39	.36	٠٤٠	÷	12.	87.	41.	11.	0/	
.15	87.	٠٤٠	18.	À	.32	*	38	3.	38.	.27	<b>6</b> 2 ·		
34	50	45	40	35,	30	25	70	15	9	6	N		

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450

MORTH



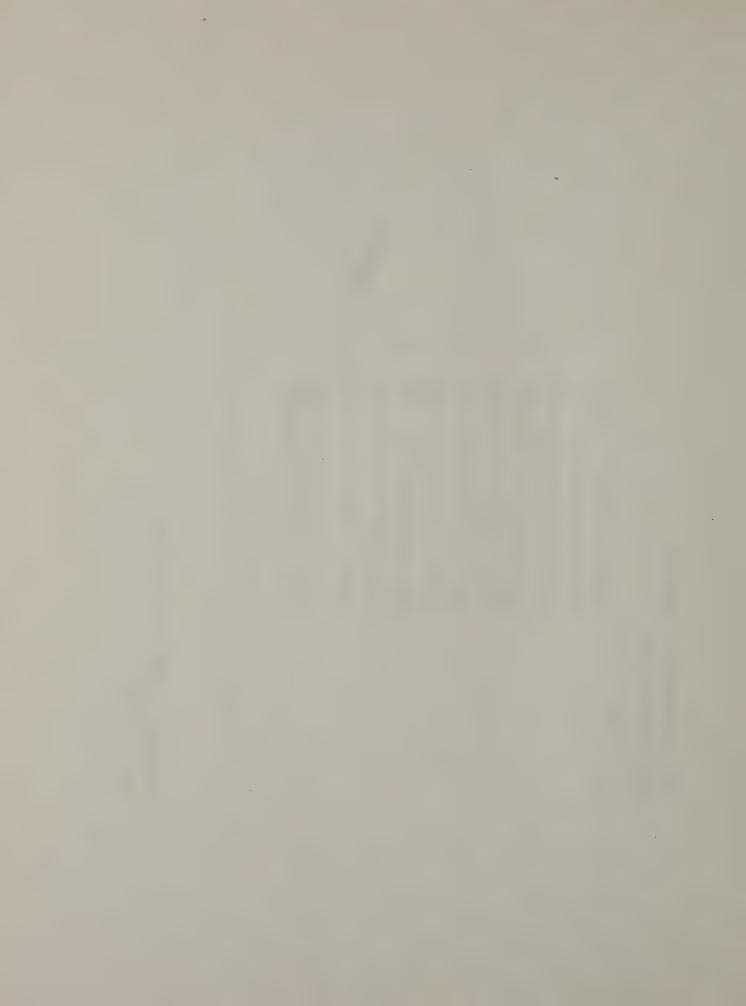
POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY)
READING IN HUNDREDTHS OF A VOLT

61.	+27	8.	.39	٠,٠	. 39	3.	3.	.32	-34	61.	7
\$2.	22.	-35	.36	9 70 •	80	.3	17.	62.	.52.	277	27
61.	35.	%.	.34	.32	.38	.32	12.	82.	97.	17:	1
4	.30	.34	×	٠٤.	38.	-39	.30	67.	.34	47°	
.78	.38	\$6	*.	3.	14.	.39	۶۶.	.37	۲٦٠	7. 4	4
3.	.18	بع.	14.	÷.	14.	.37	3.	£.	13. 48.	61.	-
61.	17.	14.	\$	*	4.	17.	*;	.36	.39	.28	2
34	29	45.	-04	7	30-	- 72	-02	7	10	6	,_d `

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK

RC 66-21 BIN 1015450

MORTH



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY)
READING IN HUNDREDTHS OF A VOLT

72	٥.	3.	8%	2.	7.	۶.	ž.	<b>3.</b>	70.	2.0.	73
.23	434	۶.	. 43	4.	*	35	87.	26	7.	61.	1/8
91.	• 7.8	*	**	- 18	.37	.35	. so	4.	٠2٧	.27	13
17.	33	34.	. 43	¥.	16.	.37	.27	٠,	2.	. 25. 25.	800
	٠3٧	3.	*.	38.	.39	5.5	.32	.29	87.	87.	33
22.	٠,٠	ģ	3,38	2	.37	.35	87.	.28	77:	£ \$	10
62.	٠. بر	*	\$	٠ 40	.38	ું.	3.	*	.45	.36	2
67.	%	7.	*-	*	£.	. ž.	67.	.32	.34	32.	38
3.	92.	,3¥	- 40	.38	16.	15.	.42	.36	.39	** \f.	25
97.	.35	3.	62.	.39	35.	بئ.	a.	7.	25.	.28	40
.36	.46	.34	۲.	16.	.34	25.	.34	.32	.27	18.	33
.31	.39	.37	7.	e.	.35	.37	-34	্ন	ક્ર	,3¢.	.0
67.	.42	9	. 36	.37	*	.42	.36	.36	.36	, oč.	70
. 32	.45	14.	*	.42	8	£,	77.	.3.	.3.	.23	9 9
.36	š	4.	.34	-37	15.	67.	.21	7	٠.2٧	.25	5
67.	.36	.37	.35	. 12	ch.	.43	. 2.6	7.	25	77.	9,
977.	.38	.32	.32	.34	نغ	*	.30	-29	.35	· 25.	5
.32	.36	\$	.38	. 43	*.	76.	.27	.29	-32	نزنخ	
97.	.31	.37	35.	38.	36.	33	77.	77	57.	9 7	2
.30	.37	.31	.37	-37	.36	.35,	-31	.78	ş	ريد. ريد:	9
.33 .30 .31. 12. 11. 22. 92. 92. 02. 02. 02. 05. 18. 13. 18. 02. 02. 02. 02. 02. 03. 08.	of te. 81. 86. 14. 76. 14. 26. 04. 05. 26. 34. 14. 24. 24. 24. 36. 86. 36. 16. 16. 78.	by of. 14. 24. 14. 52. 44. 14. 42. 26. 48. 78. 26. 48. 18. 14. 14. 18. 18. 18. 18. 18. 28.	64 54. 44. 84. 44. 86. 04. 14. 04. 98. 42. 22. 28. 28. 28. 38. 38. 78. 78.	34. th. 84. th. 26. or. or. or. 34. 86. 98. 18. 86. 78. 24. 78. 78. 46. 84. 84. 88. 78. 36.	14. 16. 16. 18. 16. 18. 16. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	24 26. 28. 18. 88. 28. 08. 88. 12. 28. 28. 12. 18. 14. 88. 92. 88. 04. 48. 88. 28. 18.	36 85. 08. (4. 18. 81. 01. 94. 94. 98. 48. 48. 48. 35. 31. 12. 41. 08. 72. 22. 18. 08.	42 25. 26. 12. 12. 12. 12. 13. 15. 15. 15. 15. 15. 15. 15. 15. 15. 15	26 42. 42. 62. 62. 42. 25. 16. 96. 42. 72. 06. 38. 18. 42. 22. 28. 28. 24. 06. 42.	. 25 . 47 . 47 . 75 . 75 . 75 . 36 . 38 . 38 . 38 . 38 . 38 . 38 . 38	5
77.	17.	.37	*	.37	. 3.5	35.	\$7.	24.	Ę	5 5	10/
67.		· 40	9.	.37	36	36.	.33	7	82.		13
-1-	.26 .37	, s.	*	<b>?</b>	36.	76.	67.	.47	.27	.19 .19 .23	0
61. 87.	.32	÷	رق.	38.	5	%	. 15.	ÿ	. 24	٠٠ ت	-01
25	50-	*	9	, <del>2</del> 3	30	25-	707	15.	- 01	5 K	٠,

SPAN 3

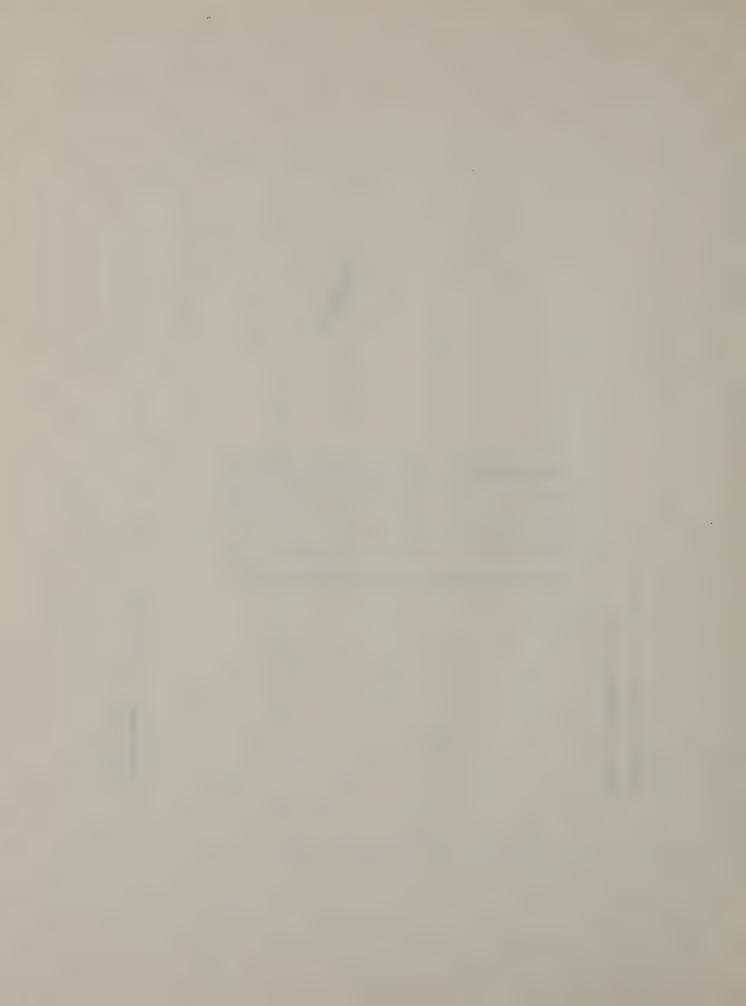
SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY)
READING IN HUNDREDTHS OF A VOLT

á	3.	3.	ž.	m·	27	35.	₹.	2.	3.	£.	2.	÷.
£/ .	77.	77.	.27	350	.,	.25	80	. 36	3.	z.	380	*
CDAM	17.	17.	32.	, Ay	or.	3.	.34	,3. <sup>4</sup>	. 37	.36	ÿ	17.
m	61.		.28	14.	34.	.32.	. se	26.	. 35	45. 36. 36. 38. 39	.26	
	7	ب	10	'n	२	25.	30-	35.	\$	*	50	- 45

SOUTHWESTERN BLVD. (ROUTE 20) OVER 18 MILE CREEK RC 66-21 BIN 1015450



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY) READING IN HUNDREDTHS OF A VOLT

												12	
Δ.	<i>y</i> .	٠. د	5 47	م. هو.	g.	ž.,	ő.	3.54	22.	2.	"	2	
6.	7	,	Ĭή	₩,	e e	ų.	Ŋ	. 2	2.		. 19	**	
22.	14.	4.	36.	.30	25.	42.	.21	8/0	9/.	. 16	61.	711	
.23	Ø.	£.	75.	62.	97.	92.	. 25	.27	.3/	.32	. 30	601	
ż	. 23	17.	96.	.33	33.	.25	77.	. 18	3	2	.25	101	
. 19	62.	. 35	£	.32	35.	.36	, 28	.3/	.3,	.16	. 3/	49	
9720	55,	. 3/	28.	ÿ	. 30	77.	97.	113	67.	.,	12.	<i>&gt;</i>	
17.	12.	5	38.	28.	86	.30	3.	ż	.24	. 27	.25	5	
51, 91, 25, 85, 05, 91, 25, 12, 05, 11, 05, 12, 12, 12, 12, 81, 52, 81, 55, 81, 55, 81,	or 42. 18. 08. 53. 95. 75. 75. 23. 25. 36. 86. 18. 75, 16. 58. 58. 83. 83. 18. 45.	ρε οε, 14, εε, β1, εε, 1ε, 5ε, 5ε, 5ε, 61, β1, δ1, εε, 1ε, 1ε, 7ε, δε, 5ε, εε, οε, οε, 1ε,	د کو. کو. کو. کو. کو. کد. کد. کد. دد. کد. کد. کو. کو. کد. کد. کو. کو. کو. کو. کو. کو. کو. کو. کو. کو	\$1 25. ot. 95, tt. st. ot. 26. 26. 16, 35, ot. 18, 31, tt. 16, 36, py. 16, 26, 86,	02 25. 83. 33. 25. 35. 06. 88. 36, 36. 46. 84. 47. 43. 28. 36. 48. 44. 94. 94. 94. 94. 94.	ود ١٥٠ محمد محمد عدد عدد عدد ود ود ود ود ود ود ود. حدد كرد هد ود ود ود. ود ود.	01 22. 12. 22. 23. 81. 81. 05. 91. 82. 81. 82. 11. 82. 81. 11. 12. 02. 12. 12. 11. 11. 11.	31. 51. 61. 52. 81. 12. 61. 62. 62. 62. 62. 62. 62. 63. 64. 81. 21. 23. 91. 14. 91.	12 42. 81. 18. 03. 18. 91. 42. 92. 02. 18. 83. 24. 25. 25. 27. 83. 18. 83. 43. 72.	. 33	. 28	24 29 34 39 49 49 59 59 64 69 74 79 84 69 49 99 104 109 114 119 129	
i.	97.	77.	78.	,31	. 32	30	.23	. 3	22.	77.	.17	29	
3	. 32.	67.	. m	98.	76.	ş		77:	.31	33	. 33	24	
. 27	98	57.	Ξ.	0	97.	67.	. 23	.24	.28	.24	.28	3	
17:	E,	٤٠.	38.	. 37	*	9	57.	.25	57.	٠, ٧	12.	3	
.22	.27	ñ.	82	22.	4.	3	. 17	3	.25	٠2٧	٤٢.	6.5	SPAN
82.	٠٤.	.87	.34		٠. کو.	35,	.23	7.	27.	?	2.	2	0.
57.	.32	90.	.39	7	.32	87.	97.	.18	z.	r	620		
87	35.	35	.39	9 8	34	12.	2.	77:	97.	'A'	77:	2	
27.	87.	. 5.3	9.	ž.	3	.34	77.	57.	31	.47	-25	5	
5	3	90	.37	.31	67.	3.	61.	61.	3.	74.	- 24	2	
22	31	30	7	78.	2	46.	.11	7.	92.	97:	150	6 61	
2	72	<u> </u>	.37	. 55	38.	17.	. 19	61.	.27	٠٤٠	57.	7	
#	39	97.	36	.35	.33	. 39	.27	.27	yE.	.47	18	. 0	
. 18	77.	5 m.	.39		. 39	34	97.	\$	.83	27	. 22.	2	
	. 87	32	٠ م	92.	te. 39	he. 84.	67.	9	.33	22. 12. 12.	. 22	, 6	
14 .24	. 2	, M	33.	38	ş	28.	<b>z</b> .	.34	3.	1.25	. 25		
	•											[*	
5	S	18.	3	35	30	2	20	15	01	6	7		

MORTH

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY)
READING IN HUNDREDTHS OF A VOLT

3.	£.	ž.	\$.	۵.	ž.,	£.	포.	ŏ.	£.	23.	3.	7	
77.	.39	14.	5	7	.37	.34	57°	n.	74.	.19	91.	-5	
27. 62.	7	3.	4	36 . 36 . 46	.34 .36 .37	18. 21. 25. 88.	57' 91' 17'	11.	.13	77:	.45	E	S DAN 6
. 23	35	7	Ŧ.	. 36	.34	97.	77.	.31 .19	. 32	22.	.14	-0	SP
81.	**	.35	.38	7.	14.	.33	97.	¥2.	38.	. 18	3.	-3-	
54 -	50	45.	40	35.	જ	25.	70-	Ä	-01	4	7	J	

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK



POTENTIAL DATA TAKEN ON 5/20/77 (AFTER OVERLAY) READING IN HUNDREDTHS OF A VOLT

81.	.36	18.	*	4.	15.	94.	.3.3	.31	. 43	. 62.	. 23	34	
113 . 15	.32	£.	7.	.43	. 43	8	ş.	.34	.33	42.	17.	44	
.13	0.00	7.	. 88	3	٠3٧	.33	.33	52.	.34	* 22	92.	74	
. 12	26. W.	84. 24.	.33	÷.	.35	*	& . & .	ž.	7.	.30	97.	-61	7 N
12.			3	.38	.36	٠٤٠ /4.	.32	3.	.33	57.	77.	1.	C PAN 7
21. 11. 61.	34.	4.	.39	7.	35.		35.	62.	. 42	k7:	9.	-0	
02.	₹.	24.	.36	1.	.37	.3 68	»÷	.34	.39	7.	61.	-7	
54-	50	45	40	35	30	25-	- 07	15	101	٦.	- 7	3	

SOUTHWESTERN BLVD, (ROUTE 20) OVER 18 MILE CREEK RC 66-21 BIN 1015450

No. 60-53 No. (\$157-50) ACCOUNT OF SETT COLUMN

AND PERSONAL PROPERTY OF STREET STREET STREET STREET



